A COMMUNICATIONS NETWORK FOR TRANSMITTING PACKETS OF DATA VIA A PLURALITY OF SEQUENTIAL ROUTERS FROM A TRANSMITTING STATION TO A RECEIVING STATION WITH PACKET HEADER CODING FOR MAXIMIZING TRANSMISSION EFFICIENCY

Abstract

A system for expediting the transmission of packets in a communication network wherein packets of data are transmitted from a transmitting station to an addressed receiving station via a plurality of routers that determine the path of the transmission. The system comprises means for transmitting packets, each comprising a payload section including the content data being transmitted, a header including the address of the receiving station and a plurality of other headers in combination with means for substituting a code item to represent the plurality of headers other than the address header in the packet. Because of the redundancy in the variety of platforms, operating systems and like protocols that Web document packets are committed to support, the plurality of headers that are to be represented by code may be readily subject to entropic encoding. Most of the combinations of headers required to support the variety of Web platforms, operating systems and related protocols may be represented by a code book listing about 30-36 symbols or items to header set conversions.